

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-053859

(43)Date of publication of application : 19.02.2002

---

(51)Int.Cl. C09K 17/32  
C08K 3/36  
C08K 5/057  
C08L 5/00  
// C09K101:00

---

(21)Application number : 2000-238513 (71)Applicant : UNITIKA LTD  
(22)Date of filing : 07.08.2000 (72)Inventor : KAWANAKA SATOSHI  
NAKAI YOSHIO  
NAITO NORIHIRO  
WADA SATOKO

---

(54) WATER HOLDING MATERIAL FOR SOIL AND SOIL IMPROVING METHOD USING THE SAME

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a water holding material for soil not effect with a metal salt having a valence  $\leq 2$  and biodegradability.

SOLUTION: This water holding material for soil includes  $\geq 50$  mass.% of a water absorbing material comprising galactomannan, boron-ion and a polyvalent metal ion having three or more valence excluding the boron-ion, and has 40 times of the tare weight of the absorbing capacity of an aqueous solution of a cation having valence  $\leq 2$ , gel strength  $\geq 2 \times 10^{-5}$  N/mm<sup>2</sup> after water absorption.

---

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's  
decision of rejection]

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]